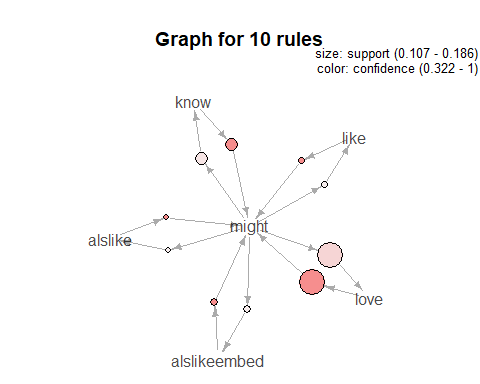
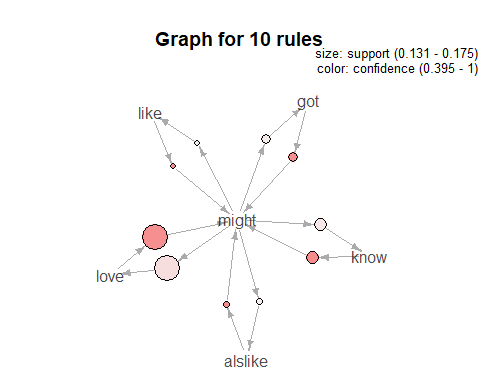
ARM Analysis of Song Lyrics Through the Decades

Sarah Edwards

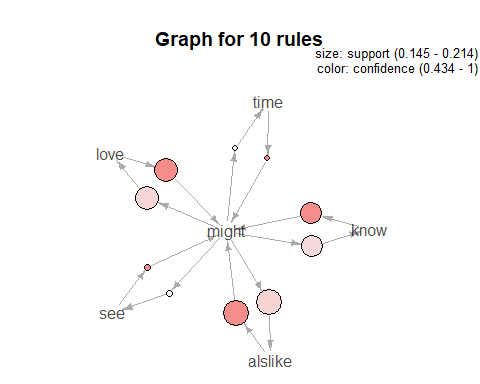
## [[1]]  
## [1] "60s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 24   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[4961 item(s), 1245 transaction(s)] done [0.01s].  
## sorting and recoding items ... [135 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 done [0.00s].  
## writing ... [1904 rule(s)] done [0.00s].  
## creating S4 object ... done [0.00s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {goodbye} => {might} 0.02088353 1.00000000 0.02088353 3.014528 26   
## [2] {might} => {goodbye} 0.02088353 0.06295400 0.33172691 3.014528 26   
## [3] {care} => {might} 0.02088353 0.96296296 0.02168675 2.902879 26   
## [4] {might} => {care} 0.02088353 0.06295400 0.33172691 2.902879 26   
## [5] {go} => {might} 0.02168675 1.00000000 0.02168675 3.014528 27   
## [6] {might} => {go} 0.02168675 0.06537530 0.33172691 3.014528 27   
## [7] {nothing} => {might} 0.02008032 1.00000000 0.02008032 3.014528 25   
## [8] {might} => {nothing} 0.02008032 0.06053269 0.33172691 3.014528 25   
## [9] {dyou} => {might} 0.02088353 1.00000000 0.02088353 3.014528 26   
## [10] {might} => {dyou} 0.02088353 0.06295400 0.33172691 3.014528 26   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {love} => {might} 0.1863454 0.9914530 0.1879518 2.988763  
## [2] {might} => {love} 0.1863454 0.5617433 0.3317269 2.988763  
## [3] {know} => {might} 0.1349398 1.0000000 0.1349398 3.014528  
## [4] {might} => {know} 0.1349398 0.4067797 0.3317269 3.014528  
## [5] {alslikeembed} => {might} 0.1124498 1.0000000 0.1124498 3.014528  
## [6] {might} => {alslikeembed} 0.1124498 0.3389831 0.3317269 3.014528  
## [7] {like} => {might} 0.1092369 0.9927007 0.1100402 2.992524  
## [8] {might} => {like} 0.1092369 0.3292978 0.3317269 2.992524  
## [9] {alslike} => {might} 0.1068273 1.0000000 0.1068273 3.014528  
## [10] {might} => {alslike} 0.1068273 0.3220339 0.3317269 3.014528  
## count  
## [1] 232   
## [2] 232   
## [3] 168   
## [4] 168   
## [5] 140   
## [6] 140   
## [7] 136   
## [8] 136   
## [9] 133   
## [10] 133   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {goodbye} => {might} 0.02088353 1 0.02088353 3.014528 26   
## [2] {go} => {might} 0.02168675 1 0.02168675 3.014528 27   
## [3] {nothing} => {might} 0.02008032 1 0.02008032 3.014528 25   
## [4] {dyou} => {might} 0.02088353 1 0.02088353 3.014528 26   
## [5] {try} => {might} 0.02168675 1 0.02168675 3.014528 27   
## [6] {embed} => {might} 0.02088353 1 0.02088353 3.014528 26   
## [7] {start} => {might} 0.02329317 1 0.02329317 3.014528 29   
## [8] {tsee} => {might} 0.02008032 1 0.02008032 3.014528 25   
## [9] {wait} => {might} 0.02248996 1 0.02248996 3.014528 28   
## [10] {everything} => {might} 0.02088353 1 0.02088353 3.014528 26   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 12   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[4961 item(s), 1245 transaction(s)] done [0.01s].  
## sorting and recoding items ... [299 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 done [0.00s].  
## writing ... [1062 rule(s)] done [0.00s].  
## creating S4 object ... done [0.00s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {loveyou} => {love} 0.01044177 0.9285714 0.01124498 4.940476 13   
## [2] {stars} => {love} 0.01044177 0.7647059 0.01365462 4.068627 13   
## [3] {tomorrow} => {love} 0.01044177 0.8125000 0.01285141 4.322917 13   
## [4] {thold} => {love} 0.01124498 0.8750000 0.01285141 4.655449 14   
## [5] {dream} => {love} 0.01204819 0.8333333 0.01445783 4.433761 15   
## [6] {die} => {love} 0.01044177 0.7222222 0.01445783 3.842593 13   
## [7] {tlove} => {love} 0.01204819 0.7894737 0.01526104 4.200405 15   
## [8] {stay} => {love} 0.01044177 0.6500000 0.01606426 3.458333 13   
## [9] {till} => {love} 0.01124498 0.7777778 0.01445783 4.138177 14   
## [10] {wrong} => {love} 0.01124498 0.7777778 0.01445783 4.138177 14   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {might} => {love} 0.18634538 0.5617433 0.33172691 2.988763  
## [2] {know} => {love} 0.08273092 0.6130952 0.13493976 3.261981  
## [3] {know, might} => {love} 0.08273092 0.6130952 0.13493976 3.261981  
## [4] {alslikeembed} => {love} 0.07228916 0.6428571 0.11244980 3.420330  
## [5] {alslikeembed, might} => {love} 0.07228916 0.6428571 0.11244980 3.420330  
## [6] {heart} => {love} 0.06345382 0.7314815 0.08674699 3.891857  
## [7] {heart, might} => {love} 0.06184739 0.7264151 0.08514056 3.864901  
## [8] {never} => {love} 0.05863454 0.6186441 0.09477912 3.291504  
## [9] {might, never} => {love} 0.05783133 0.6153846 0.09397590 3.274162  
## [10] {alslike} => {love} 0.05702811 0.5338346 0.10682731 2.840274  
## count  
## [1] 232   
## [2] 103   
## [3] 103   
## [4] 90   
## [5] 90   
## [6] 79   
## [7] 77   
## [8] 73   
## [9] 72   
## [10] 71   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence  
## [1] {darling, heart} => {love} 0.01044177 1   
## [2] {alslikeembed, true} => {love} 0.01285141 1   
## [3] {always, mine} => {love} 0.01044177 1   
## [4] {heart, would} => {love} 0.01285141 1   
## [5] {darling, heart, might} => {love} 0.01044177 1   
## [6] {alslikeembed, might, true} => {love} 0.01285141 1   
## [7] {always, might, mine} => {love} 0.01044177 1   
## [8] {heart, might, would} => {love} 0.01285141 1   
## [9] {alslikeembed, never, say} => {love} 0.01044177 1   
## [10] {alslikeembed, might, never, say} => {love} 0.01044177 1   
## coverage lift count  
## [1] 0.01044177 5.320513 13   
## [2] 0.01285141 5.320513 16   
## [3] 0.01044177 5.320513 13   
## [4] 0.01285141 5.320513 16   
## [5] 0.01044177 5.320513 13   
## [6] 0.01285141 5.320513 16   
## [7] 0.01044177 5.320513 13   
## [8] 0.01285141 5.320513 16   
## [9] 0.01044177 5.320513 13   
## [10] 0.01044177 5.320513 13



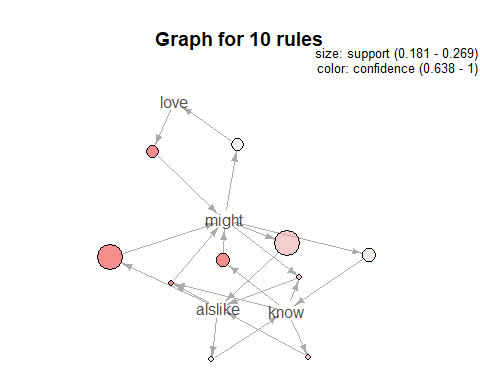
## [[1]]  
## [1] "70s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 11   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[3732 item(s), 573 transaction(s)] done [0.00s].  
## sorting and recoding items ... [193 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 done [0.00s].  
## writing ... [6580 rule(s)] done [0.00s].  
## creating S4 object ... done [0.00s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {arms} => {might} 0.02094241 1.00000000 0.02094241 3.015789 12   
## [2] {might} => {arms} 0.02094241 0.06315789 0.33158813 3.015789 12   
## [3] {lonely} => {might} 0.02268761 1.00000000 0.02268761 3.015789 13   
## [4] {might} => {lonely} 0.02268761 0.06842105 0.33158813 3.015789 13   
## [5] {cry} => {might} 0.02268761 1.00000000 0.02268761 3.015789 13   
## [6] {might} => {cry} 0.02268761 0.06842105 0.33158813 3.015789 13   
## [7] {happy} => {might} 0.02094241 1.00000000 0.02094241 3.015789 12   
## [8] {might} => {happy} 0.02094241 0.06315789 0.33158813 3.015789 12   
## [9] {honey} => {might} 0.02094241 1.00000000 0.02094241 3.015789 12   
## [10] {might} => {honey} 0.02094241 0.06315789 0.33158813 3.015789 12   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift count  
## [1] {love} => {might} 0.1745201 0.9900990 0.1762653 2.985930 100   
## [2] {might} => {love} 0.1745201 0.5263158 0.3315881 2.985930 100   
## [3] {know} => {might} 0.1448517 1.0000000 0.1448517 3.015789 83   
## [4] {might} => {know} 0.1448517 0.4368421 0.3315881 3.015789 83   
## [5] {got} => {might} 0.1378709 0.9875000 0.1396161 2.978092 79   
## [6] {might} => {got} 0.1378709 0.4157895 0.3315881 2.978092 79   
## [7] {alslike} => {might} 0.1326353 1.0000000 0.1326353 3.015789 76   
## [8] {might} => {alslike} 0.1326353 0.4000000 0.3315881 3.015789 76   
## [9] {like} => {might} 0.1308901 1.0000000 0.1308901 3.015789 75   
## [10] {might} => {like} 0.1308901 0.3947368 0.3315881 3.015789 75   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {arms} => {might} 0.02094241 1 0.02094241 3.015789 12   
## [2] {lonely} => {might} 0.02268761 1 0.02268761 3.015789 13   
## [3] {cry} => {might} 0.02268761 1 0.02268761 3.015789 13   
## [4] {happy} => {might} 0.02094241 1 0.02094241 3.015789 12   
## [5] {honey} => {might} 0.02094241 1 0.02094241 3.015789 12   
## [6] {lovin} => {might} 0.02268761 1 0.02268761 3.015789 13   
## [7] {show} => {might} 0.02094241 1 0.02094241 3.015789 12   
## [8] {light} => {might} 0.02443281 1 0.02443281 3.015789 14   
## [9] {ya} => {might} 0.02268761 1 0.02268761 3.015789 13   
## [10] {beautiful} => {might} 0.02268761 1 0.02268761 3.015789 13   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 5   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[3732 item(s), 573 transaction(s)] done [0.00s].  
## sorting and recoding items ... [405 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 done [0.01s].  
## writing ... [5517 rule(s)] done [0.00s].  
## creating S4 object ... done [0.00s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {kiss} => {love} 0.01047120 0.8571429 0.01221640 4.862801 6   
## [2] {reach} => {love} 0.01047120 1.0000000 0.01047120 5.673267 6   
## [3] {die} => {love} 0.01047120 0.8571429 0.01221640 4.862801 6   
## [4] {hearts} => {love} 0.01221640 1.0000000 0.01221640 5.673267 7   
## [5] {goodbye} => {love} 0.01047120 1.0000000 0.01047120 5.673267 6   
## [6] {wine} => {love} 0.01047120 1.0000000 0.01047120 5.673267 6   
## [7] {lips} => {love} 0.01221640 0.8750000 0.01396161 4.964109 7   
## [8] {waiting} => {love} 0.01047120 0.7500000 0.01396161 4.254950 6   
## [9] {alright} => {love} 0.01047120 0.6000000 0.01745201 3.403960 6   
## [10] {stay} => {love} 0.01570681 0.9000000 0.01745201 5.105941 9   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift count  
## [1] {might} => {love} 0.17452007 0.5263158 0.3315881 2.985930 100   
## [2] {know} => {love} 0.09075044 0.6265060 0.1448517 3.554336 52   
## [3] {know, might} => {love} 0.09075044 0.6265060 0.1448517 3.554336 52   
## [4] {like} => {love} 0.08202443 0.6266667 0.1308901 3.555248 47   
## [5] {like, might} => {love} 0.08202443 0.6266667 0.1308901 3.555248 47   
## [6] {baby} => {love} 0.07504363 0.6935484 0.1082024 3.934685 43   
## [7] {baby, might} => {love} 0.07329843 0.6885246 0.1064572 3.906184 42   
## [8] {got} => {love} 0.06980803 0.5000000 0.1396161 2.836634 40   
## [9] {got, might} => {love} 0.06806283 0.4936709 0.1378709 2.800727 39   
## [10] {time} => {love} 0.06631763 0.6031746 0.1099476 3.421971 38   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {reach} => {love} 0.01047120 1 0.01047120 5.673267 6   
## [2] {hearts} => {love} 0.01221640 1 0.01221640 5.673267 7   
## [3] {goodbye} => {love} 0.01047120 1 0.01047120 5.673267 6   
## [4] {wine} => {love} 0.01047120 1 0.01047120 5.673267 6   
## [5] {feeling} => {love} 0.01745201 1 0.01745201 5.673267 10   
## [6] {might, reach} => {love} 0.01047120 1 0.01047120 5.673267 6   
## [7] {get, hearts} => {love} 0.01047120 1 0.01047120 5.673267 6   
## [8] {hearts, might} => {love} 0.01221640 1 0.01221640 5.673267 7   
## [9] {goodbye, might} => {love} 0.01047120 1 0.01047120 5.673267 6   
## [10] {might, wine} => {love} 0.01047120 1 0.01047120 5.673267 6



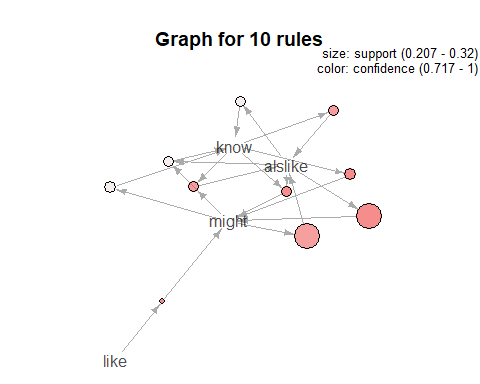
## [[1]]  
## [1] "80s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 22   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[5390 item(s), 1119 transaction(s)] done [0.01s].  
## sorting and recoding items ... [208 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 done [0.00s].  
## writing ... [19071 rule(s)] done [0.00s].  
## creating S4 object ... done [0.00s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {strong} => {might} 0.02055407 1.00000000 0.02055407 3 23   
## [2] {might} => {strong} 0.02055407 0.06166220 0.33333333 3 23   
## [3] {lonely} => {might} 0.02234138 1.00000000 0.02234138 3 25   
## [4] {might} => {lonely} 0.02234138 0.06702413 0.33333333 3 25   
## [5] {fool} => {might} 0.02055407 1.00000000 0.02055407 3 23   
## [6] {might} => {fool} 0.02055407 0.06166220 0.33333333 3 23   
## [7] {alright} => {might} 0.02055407 1.00000000 0.02055407 3 23   
## [8] {might} => {alright} 0.02055407 0.06166220 0.33333333 3 23   
## [9] {cry} => {might} 0.02234138 1.00000000 0.02234138 3 25   
## [10] {might} => {cry} 0.02234138 0.06702413 0.33333333 3 25   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift count  
## [1] {alslike} => {might} 0.2144772 1.0000000 0.2144772 3 240   
## [2] {might} => {alslike} 0.2144772 0.6434316 0.3333333 3 240   
## [3] {love} => {might} 0.2073280 1.0000000 0.2073280 3 232   
## [4] {might} => {love} 0.2073280 0.6219839 0.3333333 3 232   
## [5] {know} => {might} 0.2001787 1.0000000 0.2001787 3 224   
## [6] {might} => {know} 0.2001787 0.6005362 0.3333333 3 224   
## [7] {see} => {might} 0.1456658 1.0000000 0.1456658 3 163   
## [8] {might} => {see} 0.1456658 0.4369973 0.3333333 3 163   
## [9] {time} => {might} 0.1447721 1.0000000 0.1447721 3 162   
## [10] {might} => {time} 0.1447721 0.4343164 0.3333333 3 162   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {strong} => {might} 0.02055407 1 0.02055407 3 23   
## [2] {lonely} => {might} 0.02234138 1 0.02234138 3 25   
## [3] {fool} => {might} 0.02055407 1 0.02055407 3 23   
## [4] {alright} => {might} 0.02055407 1 0.02055407 3 23   
## [5] {cry} => {might} 0.02234138 1 0.02234138 3 25   
## [6] {making} => {might} 0.02055407 1 0.02055407 3 23   
## [7] {help} => {might} 0.02055407 1 0.02055407 3 23   
## [8] {name} => {might} 0.02055407 1 0.02055407 3 23   
## [9] {talk} => {might} 0.02055407 1 0.02055407 3 23   
## [10] {crazy} => {might} 0.02055407 1 0.02055407 3 23   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 11   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[5390 item(s), 1119 transaction(s)] done [0.01s].  
## sorting and recoding items ... [406 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 done [0.02s].  
## writing ... [12685 rule(s)] done [0.00s].  
## creating S4 object ... done [0.00s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {searching} => {love} 0.01072386 1.0000000 0.01072386 4.823276 12   
## [2] {needs} => {love} 0.01072386 0.9230769 0.01161752 4.452255 12   
## [3] {tlive} => {love} 0.01072386 1.0000000 0.01072386 4.823276 12   
## [4] {known} => {love} 0.01072386 0.9230769 0.01161752 4.452255 12   
## [5] {tdo} => {love} 0.01072386 0.8571429 0.01251117 4.134236 12   
## [6] {darling} => {love} 0.01161752 0.7647059 0.01519214 3.688387 13   
## [7] {di} => {love} 0.01072386 0.8571429 0.01251117 4.134236 12   
## [8] {hurt} => {love} 0.01072386 0.7500000 0.01429848 3.617457 12   
## [9] {days} => {love} 0.01072386 0.8000000 0.01340483 3.858621 12   
## [10] {tfind} => {love} 0.01072386 0.7500000 0.01429848 3.617457 12   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift count  
## [1] {might} => {love} 0.20732797 0.6219839 0.3333333 3.000000 232   
## [2] {know} => {love} 0.13494191 0.6741071 0.2001787 3.251405 151   
## [3] {know, might} => {love} 0.13494191 0.6741071 0.2001787 3.251405 151   
## [4] {alslike} => {love} 0.13047364 0.6083333 0.2144772 2.934159 146   
## [5] {alslike, might} => {love} 0.13047364 0.6083333 0.2144772 2.934159 146   
## [6] {time} => {love} 0.09830206 0.6790123 0.1447721 3.275064 110   
## [7] {might, time} => {love} 0.09830206 0.6790123 0.1447721 3.275064 110   
## [8] {see} => {love} 0.09383378 0.6441718 0.1456658 3.107018 105   
## [9] {might, see} => {love} 0.09383378 0.6441718 0.1456658 3.107018 105   
## [10] {like} => {love} 0.09115282 0.6415094 0.1420912 3.094177 102   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift   
## [1] {searching} => {love} 0.01072386 1 0.01072386 4.823276  
## [2] {tlive} => {love} 0.01072386 1 0.01072386 4.823276  
## [3] {might, searching} => {love} 0.01072386 1 0.01072386 4.823276  
## [4] {might, tlive} => {love} 0.01072386 1 0.01072386 4.823276  
## [5] {know, till} => {love} 0.01072386 1 0.01072386 4.823276  
## [6] {strong, time} => {love} 0.01072386 1 0.01072386 4.823276  
## [7] {apart, know} => {love} 0.01697945 1 0.01697945 4.823276  
## [8] {see, start} => {love} 0.01072386 1 0.01072386 4.823276  
## [9] {arms, hold} => {love} 0.01072386 1 0.01072386 4.823276  
## [10] {arms, want} => {love} 0.01161752 1 0.01161752 4.823276  
## count  
## [1] 12   
## [2] 12   
## [3] 12   
## [4] 12   
## [5] 12   
## [6] 12   
## [7] 19   
## [8] 12   
## [9] 12   
## [10] 13



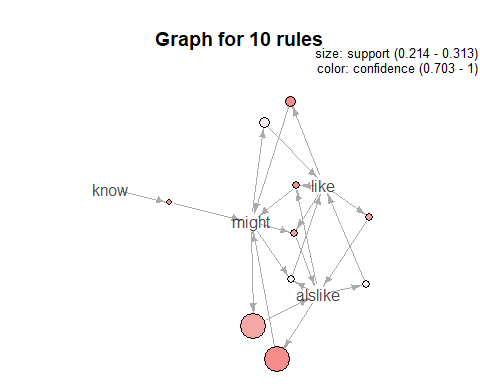
## [[1]]  
## [1] "90s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 19   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[6268 item(s), 969 transaction(s)] done [0.01s].  
## sorting and recoding items ... [231 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 done [0.01s].  
## writing ... [92799 rule(s)] done [0.01s].  
## creating S4 object ... done [0.02s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {heaven} => {might} 0.02167183 1.00000000 0.02167183 3 21   
## [2] {might} => {heaven} 0.02167183 0.06501548 0.33333333 3 21   
## [3] {tstay} => {might} 0.02167183 1.00000000 0.02167183 3 21   
## [4] {might} => {tstay} 0.02167183 0.06501548 0.33333333 3 21   
## [5] {anything} => {might} 0.02167183 1.00000000 0.02167183 3 21   
## [6] {might} => {anything} 0.02167183 0.06501548 0.33333333 3 21   
## [7] {als} => {might} 0.02786378 1.00000000 0.02786378 3 27   
## [8] {might} => {als} 0.02786378 0.08359133 0.33333333 3 27   
## [9] {sky} => {might} 0.02270382 1.00000000 0.02270382 3 22   
## [10] {might} => {sky} 0.02270382 0.06811146 0.33333333 3 22   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift count  
## [1] {alslike} => {might} 0.2693498 1.0000000 0.2693498 3.00000 261   
## [2] {might} => {alslike} 0.2693498 0.8080495 0.3333333 3.00000 261   
## [3] {know} => {might} 0.2167183 1.0000000 0.2167183 3.00000 210   
## [4] {might} => {know} 0.2167183 0.6501548 0.3333333 3.00000 210   
## [5] {love} => {might} 0.2125903 1.0000000 0.2125903 3.00000 206   
## [6] {might} => {love} 0.2125903 0.6377709 0.3333333 3.00000 206   
## [7] {know} => {alslike} 0.1805986 0.8333333 0.2167183 3.09387 175   
## [8] {alslike} => {know} 0.1805986 0.6704981 0.2693498 3.09387 175   
## [9] {alslike, know} => {might} 0.1805986 1.0000000 0.1805986 3.00000 175   
## [10] {know, might} => {alslike} 0.1805986 0.8333333 0.2167183 3.09387 175   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {heaven} => {might} 0.02167183 1 0.02167183 3 21   
## [2] {tstay} => {might} 0.02167183 1 0.02167183 3 21   
## [3] {anything} => {might} 0.02167183 1 0.02167183 3 21   
## [4] {als} => {might} 0.02786378 1 0.02786378 3 27   
## [5] {sky} => {might} 0.02270382 1 0.02270382 3 22   
## [6] {apart} => {might} 0.02167183 1 0.02167183 3 21   
## [7] {tears} => {might} 0.02476780 1 0.02476780 3 24   
## [8] {fool} => {might} 0.02063983 1 0.02063983 3 20   
## [9] {smile} => {might} 0.02270382 1 0.02270382 3 22   
## [10] {talk} => {might} 0.02270382 1 0.02270382 3 22   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 9   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[6268 item(s), 969 transaction(s)] done [0.01s].  
## sorting and recoding items ... [497 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 10 done [0.14s].  
## writing ... [79779 rule(s)] done [0.02s].  
## creating S4 object ... done [0.04s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {intyour} => {love} 0.01031992 1.0000000 0.01031992 4.703883 10   
## [2] {needed} => {love} 0.01031992 0.9090909 0.01135191 4.276258 10   
## [3] {danything} => {love} 0.01031992 0.9090909 0.01135191 4.276258 10   
## [4] {part} => {love} 0.01135191 1.0000000 0.01135191 4.703883 11   
## [5] {gave} => {love} 0.01031992 0.7692308 0.01341589 3.618372 10   
## [6] {morning} => {love} 0.01135191 0.8461538 0.01341589 3.980209 11   
## [7] {reach} => {love} 0.01238390 0.8000000 0.01547988 3.763107 12   
## [8] {tcry} => {love} 0.01135191 0.7857143 0.01444788 3.695908 11   
## [9] {promise} => {love} 0.01031992 0.7692308 0.01341589 3.618372 10   
## [10] {hurt} => {love} 0.01031992 0.7692308 0.01341589 3.618372 10   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {might} => {love} 0.2125903 0.6377709 0.3333333 3.000000  
## [2] {alslike} => {love} 0.1775026 0.6590038 0.2693498 3.099877  
## [3] {alslike, might} => {love} 0.1775026 0.6590038 0.2693498 3.099877  
## [4] {know} => {love} 0.1444788 0.6666667 0.2167183 3.135922  
## [5] {know, might} => {love} 0.1444788 0.6666667 0.2167183 3.135922  
## [6] {baby} => {love} 0.1238390 0.7228916 0.1713106 3.400398  
## [7] {baby, might} => {love} 0.1238390 0.7228916 0.1713106 3.400398  
## [8] {alslike, know} => {love} 0.1238390 0.6857143 0.1805986 3.225520  
## [9] {alslike, know, might} => {love} 0.1238390 0.6857143 0.1805986 3.225520  
## [10] {see} => {love} 0.1145511 0.6727273 0.1702786 3.164431  
## count  
## [1] 206   
## [2] 172   
## [3] 172   
## [4] 140   
## [5] 140   
## [6] 120   
## [7] 120   
## [8] 120   
## [9] 120   
## [10] 111   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {intyour} => {love} 0.01031992 1 0.01031992 4.703883 10   
## [2] {part} => {love} 0.01135191 1 0.01135191 4.703883 11   
## [3] {lovin} => {love} 0.01547988 1 0.01547988 4.703883 15   
## [4] {intyour, might} => {love} 0.01031992 1 0.01031992 4.703883 10   
## [5] {might, part} => {love} 0.01135191 1 0.01135191 4.703883 11   
## [6] {intmy, know} => {love} 0.01031992 1 0.01031992 4.703883 10   
## [7] {heart, tlove} => {love} 0.01135191 1 0.01135191 4.703883 11   
## [8] {lovin, want} => {love} 0.01135191 1 0.01135191 4.703883 11   
## [9] {let, lovin} => {love} 0.01135191 1 0.01135191 4.703883 11   
## [10] {like, lovin} => {love} 0.01238390 1 0.01238390 4.703883 12



## [[1]]  
## [1] "2000s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 11   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[4886 item(s), 594 transaction(s)] done [0.01s].  
## sorting and recoding items ... [267 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 10 done [0.02s].  
## writing ... [233058 rule(s)] done [0.03s].  
## creating S4 object ... done [0.06s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {tears} => {alslike} 0.02020202 1.00000000 0.02020202 3.126316 12   
## [2] {alslike} => {tears} 0.02020202 0.06315789 0.31986532 3.126316 12   
## [3] {tears} => {might} 0.02020202 1.00000000 0.02020202 3.000000 12   
## [4] {might} => {tears} 0.02020202 0.06060606 0.33333333 3.000000 12   
## [5] {lie} => {alslike} 0.02020202 1.00000000 0.02020202 3.126316 12   
## [6] {alslike} => {lie} 0.02020202 0.06315789 0.31986532 3.126316 12   
## [7] {lie} => {might} 0.02020202 1.00000000 0.02020202 3.000000 12   
## [8] {might} => {lie} 0.02020202 0.06060606 0.33333333 3.000000 12   
## [9] {arms} => {alslike} 0.02020202 1.00000000 0.02020202 3.126316 12   
## [10] {alslike} => {arms} 0.02020202 0.06315789 0.31986532 3.126316 12   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {alslike} => {might} 0.3198653 1.0000000 0.3198653 3.000000  
## [2] {might} => {alslike} 0.3198653 0.9595960 0.3333333 3.000000  
## [3] {know} => {might} 0.2390572 1.0000000 0.2390572 3.000000  
## [4] {might} => {know} 0.2390572 0.7171717 0.3333333 3.000000  
## [5] {know} => {alslike} 0.2306397 0.9647887 0.2390572 3.016234  
## [6] {alslike} => {know} 0.2306397 0.7210526 0.3198653 3.016234  
## [7] {alslike, know} => {might} 0.2306397 1.0000000 0.2306397 3.000000  
## [8] {know, might} => {alslike} 0.2306397 0.9647887 0.2390572 3.016234  
## [9] {alslike, might} => {know} 0.2306397 0.7210526 0.3198653 3.016234  
## [10] {like} => {might} 0.2070707 1.0000000 0.2070707 3.000000  
## count  
## [1] 190   
## [2] 190   
## [3] 142   
## [4] 142   
## [5] 137   
## [6] 137   
## [7] 137   
## [8] 137   
## [9] 137   
## [10] 123   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {tears} => {alslike} 0.02020202 1 0.02020202 3.126316 12   
## [2] {tears} => {might} 0.02020202 1 0.02020202 3.000000 12   
## [3] {lie} => {alslike} 0.02020202 1 0.02020202 3.126316 12   
## [4] {lie} => {might} 0.02020202 1 0.02020202 3.000000 12   
## [5] {arms} => {alslike} 0.02020202 1 0.02020202 3.126316 12   
## [6] {arms} => {might} 0.02020202 1 0.02020202 3.000000 12   
## [7] {voice} => {alslike} 0.02020202 1 0.02020202 3.126316 12   
## [8] {voice} => {might} 0.02020202 1 0.02020202 3.000000 12   
## [9] {fight} => {might} 0.02356902 1 0.02356902 3.000000 14   
## [10] {knows} => {alslike} 0.02020202 1 0.02020202 3.126316 12   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 5   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[4886 item(s), 594 transaction(s)] done [0.01s].  
## sorting and recoding items ... [578 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 10 done [0.50s].  
## writing ... [108705 rule(s)] done [0.05s].  
## creating S4 object ... done [0.06s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {takes} => {love} 0.01010101 0.8571429 0.01178451 5.657143 6   
## [2] {promise} => {love} 0.01178451 1.0000000 0.01178451 6.600000 7   
## [3] {fell} => {love} 0.01010101 1.0000000 0.01010101 6.600000 6   
## [4] {happy} => {love} 0.01178451 1.0000000 0.01178451 6.600000 7   
## [5] {tgive} => {love} 0.01010101 1.0000000 0.01010101 6.600000 6   
## [6] {closer} => {love} 0.01010101 0.8571429 0.01178451 5.657143 6   
## [7] {cannot} => {love} 0.01010101 0.7500000 0.01346801 4.950000 6   
## [8] {loved} => {love} 0.01010101 0.6666667 0.01515152 4.400000 6   
## [9] {beautiful} => {love} 0.01010101 0.8571429 0.01178451 5.657143 6   
## [10] {nneed} => {love} 0.01010101 0.8571429 0.01178451 5.657143 6   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {might} => {love} 0.1515152 0.4545455 0.3333333 3.000000  
## [2] {alslike} => {love} 0.1464646 0.4578947 0.3198653 3.022105  
## [3] {alslike, might} => {love} 0.1464646 0.4578947 0.3198653 3.022105  
## [4] {know} => {love} 0.1111111 0.4647887 0.2390572 3.067606  
## [5] {know, might} => {love} 0.1111111 0.4647887 0.2390572 3.067606  
## [6] {alslike, know} => {love} 0.1077441 0.4671533 0.2306397 3.083212  
## [7] {alslike, know, might} => {love} 0.1077441 0.4671533 0.2306397 3.083212  
## [8] {like} => {love} 0.0993266 0.4796748 0.2070707 3.165854  
## [9] {like, might} => {love} 0.0993266 0.4796748 0.2070707 3.165854  
## [10] {alslike, like} => {love} 0.0976431 0.4833333 0.2020202 3.190000  
## count  
## [1] 90   
## [2] 87   
## [3] 87   
## [4] 66   
## [5] 66   
## [6] 64   
## [7] 64   
## [8] 59   
## [9] 59   
## [10] 58   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {promise} => {love} 0.01178451 1 0.01178451 6.6 7   
## [2] {fell} => {love} 0.01010101 1 0.01010101 6.6 6   
## [3] {happy} => {love} 0.01178451 1 0.01178451 6.6 7   
## [4] {tgive} => {love} 0.01010101 1 0.01010101 6.6 6   
## [5] {know, promise} => {love} 0.01010101 1 0.01010101 6.6 6   
## [6] {alslike, promise} => {love} 0.01178451 1 0.01178451 6.6 7   
## [7] {might, promise} => {love} 0.01178451 1 0.01178451 6.6 7   
## [8] {fell, way} => {love} 0.01010101 1 0.01010101 6.6 6   
## [9] {fell, time} => {love} 0.01010101 1 0.01010101 6.6 6   
## [10] {alslike, fell} => {love} 0.01010101 1 0.01010101 6.6 6



## [[1]]  
## [1] "2010s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 12   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[4861 item(s), 627 transaction(s)] done [0.01s].  
## sorting and recoding items ... [240 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 10 done [0.01s].  
## writing ... [144737 rule(s)] done [0.02s].  
## creating S4 object ... done [0.04s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {ni} => {alslike} 0.02073365 1.00000000 0.02073365 3.19898 13   
## [2] {alslike} => {ni} 0.02073365 0.06632653 0.31259968 3.19898 13   
## [3] {ni} => {might} 0.02073365 1.00000000 0.02073365 3.00000 13   
## [4] {might} => {ni} 0.02073365 0.06220096 0.33333333 3.00000 13   
## [5] {maybe} => {alslike} 0.02073365 1.00000000 0.02073365 3.19898 13   
## [6] {alslike} => {maybe} 0.02073365 0.06632653 0.31259968 3.19898 13   
## [7] {maybe} => {might} 0.02073365 1.00000000 0.02073365 3.00000 13   
## [8] {might} => {maybe} 0.02073365 0.06220096 0.33333333 3.00000 13   
## [9] {floor} => {might} 0.02073365 1.00000000 0.02073365 3.00000 13   
## [10] {might} => {floor} 0.02073365 0.06220096 0.33333333 3.00000 13   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {alslike} => {might} 0.3125997 1.0000000 0.3125997 3.000000  
## [2] {might} => {alslike} 0.3125997 0.9377990 0.3333333 3.000000  
## [3] {like} => {might} 0.2344498 1.0000000 0.2344498 3.000000  
## [4] {might} => {like} 0.2344498 0.7033493 0.3333333 3.000000  
## [5] {like} => {alslike} 0.2232855 0.9523810 0.2344498 3.046647  
## [6] {alslike} => {like} 0.2232855 0.7142857 0.3125997 3.046647  
## [7] {alslike, like} => {might} 0.2232855 1.0000000 0.2232855 3.000000  
## [8] {like, might} => {alslike} 0.2232855 0.9523810 0.2344498 3.046647  
## [9] {alslike, might} => {like} 0.2232855 0.7142857 0.3125997 3.046647  
## [10] {know} => {might} 0.2137161 1.0000000 0.2137161 3.000000  
## count  
## [1] 196   
## [2] 196   
## [3] 147   
## [4] 147   
## [5] 140   
## [6] 140   
## [7] 140   
## [8] 140   
## [9] 140   
## [10] 134   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {ni} => {alslike} 0.02073365 1 0.02073365 3.19898 13   
## [2] {ni} => {might} 0.02073365 1 0.02073365 3.00000 13   
## [3] {maybe} => {alslike} 0.02073365 1 0.02073365 3.19898 13   
## [4] {maybe} => {might} 0.02073365 1 0.02073365 3.00000 13   
## [5] {floor} => {might} 0.02073365 1 0.02073365 3.00000 13   
## [6] {waiting} => {alslike} 0.02232855 1 0.02232855 3.19898 14   
## [7] {waiting} => {might} 0.02232855 1 0.02232855 3.00000 14   
## [8] {thinkin} => {might} 0.02073365 1 0.02073365 3.00000 13   
## [9] {true} => {alslike} 0.02232855 1 0.02232855 3.19898 14   
## [10] {true} => {might} 0.02232855 1 0.02232855 3.00000 14   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 6   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[4861 item(s), 627 transaction(s)] done [0.01s].  
## sorting and recoding items ... [505 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 10 done [0.12s].  
## writing ... [43249 rule(s)] done [0.02s].  
## creating S4 object ... done [0.02s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {rest} => {love} 0.01116427 1.0000000 0.01116427 5.805556 7   
## [2] {line} => {love} 0.01116427 0.8750000 0.01275917 5.079861 7   
## [3] {hide} => {love} 0.01116427 0.8750000 0.01275917 5.079861 7   
## [4] {hot} => {love} 0.01275917 0.8000000 0.01594896 4.644444 8   
## [5] {dyou} => {love} 0.01116427 0.7777778 0.01435407 4.515432 7   
## [6] {mistakes} => {love} 0.01116427 0.8750000 0.01275917 5.079861 7   
## [7] {space} => {love} 0.01116427 0.8750000 0.01275917 5.079861 7   
## [8] {talking} => {love} 0.01116427 0.7000000 0.01594896 4.063889 7   
## [9] {worth} => {love} 0.01275917 0.8888889 0.01435407 5.160494 8   
## [10] {taste} => {love} 0.01116427 0.6363636 0.01754386 3.694444 7   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {might} => {love} 0.1722488 0.5167464 0.3333333 3.000000  
## [2] {alslike} => {love} 0.1658692 0.5306122 0.3125997 3.080499  
## [3] {alslike, might} => {love} 0.1658692 0.5306122 0.3125997 3.080499  
## [4] {like} => {love} 0.1212121 0.5170068 0.2344498 3.001512  
## [5] {like, might} => {love} 0.1212121 0.5170068 0.2344498 3.001512  
## [6] {alslike, like} => {love} 0.1180223 0.5285714 0.2232855 3.068651  
## [7] {alslike, like, might} => {love} 0.1180223 0.5285714 0.2232855 3.068651  
## [8] {know} => {love} 0.1100478 0.5149254 0.2137161 2.989428  
## [9] {know, might} => {love} 0.1100478 0.5149254 0.2137161 2.989428  
## [10] {alslike, know} => {love} 0.1084530 0.5312500 0.2041467 3.084201  
## count  
## [1] 108   
## [2] 104   
## [3] 104   
## [4] 76   
## [5] 76   
## [6] 74   
## [7] 74   
## [8] 69   
## [9] 69   
## [10] 68   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift   
## [1] {rest} => {love} 0.01116427 1 0.01116427 5.805556  
## [2] {alslike, rest} => {love} 0.01116427 1 0.01116427 5.805556  
## [3] {might, rest} => {love} 0.01116427 1 0.01116427 5.805556  
## [4] {make, worth} => {love} 0.01275917 1 0.01275917 5.805556  
## [5] {like, worth} => {love} 0.01116427 1 0.01116427 5.805556  
## [6] {give, summer} => {love} 0.01116427 1 0.01116427 5.805556  
## [7] {summer, tickets} => {love} 0.01116427 1 0.01116427 5.805556  
## [8] {low, summer} => {love} 0.01116427 1 0.01116427 5.805556  
## [9] {see, summer} => {love} 0.01275917 1 0.01275917 5.805556  
## [10] {outta, say} => {love} 0.01116427 1 0.01116427 5.805556  
## count  
## [1] 7   
## [2] 7   
## [3] 7   
## [4] 8   
## [5] 7   
## [6] 7   
## [7] 7   
## [8] 7   
## [9] 8   
## [10] 7



## [[1]]  
## [1] "2020s"  
##   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.02 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 5   
##   
## set item appearances ...[0 item(s)] done [0.00s].  
## set transactions ...[3729 item(s), 267 transaction(s)] done [0.00s].  
## sorting and recoding items ... [262 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 9 10 done [0.04s].  
## writing ... [803920 rule(s)] done [0.11s].  
## creating S4 object ... done [0.25s].  
## [1] "Full ARM Analysis"  
## lhs rhs support confidence coverage lift count  
## [1] {nights} => {might} 0.02247191 1.00000000 0.02247191 3.000000 6   
## [2] {might} => {nights} 0.02247191 0.06741573 0.33333333 3.000000 6   
## [3] {hurts} => {never} 0.02247191 1.00000000 0.02247191 6.209302 6   
## [4] {never} => {hurts} 0.02247191 0.13953488 0.16104869 6.209302 6   
## [5] {hurts} => {might} 0.02247191 1.00000000 0.02247191 3.000000 6   
## [6] {might} => {hurts} 0.02247191 0.06741573 0.33333333 3.000000 6   
## [7] {town} => {might} 0.02247191 1.00000000 0.02247191 3.000000 6   
## [8] {might} => {town} 0.02247191 0.06741573 0.33333333 3.000000 6   
## [9] {enough} => {like} 0.02247191 1.00000000 0.02247191 4.107692 6   
## [10] {like} => {enough} 0.02247191 0.09230769 0.24344569 4.107692 6   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift count  
## [1] {alslike} => {might} 0.3071161 1.0000000 0.3071161 3.00000 82   
## [2] {might} => {alslike} 0.3071161 0.9213483 0.3333333 3.00000 82   
## [3] {know} => {might} 0.2434457 1.0000000 0.2434457 3.00000 65   
## [4] {might} => {know} 0.2434457 0.7303371 0.3333333 3.00000 65   
## [5] {like} => {might} 0.2434457 1.0000000 0.2434457 3.00000 65   
## [6] {might} => {like} 0.2434457 0.7303371 0.3333333 3.00000 65   
## [7] {like} => {alslike} 0.2359551 0.9692308 0.2434457 3.15591 63   
## [8] {alslike} => {like} 0.2359551 0.7682927 0.3071161 3.15591 63   
## [9] {alslike, like} => {might} 0.2359551 1.0000000 0.2359551 3.00000 63   
## [10] {like, might} => {alslike} 0.2359551 0.9692308 0.2434457 3.15591 63   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {nights} => {might} 0.02247191 1 0.02247191 3.000000 6   
## [2] {hurts} => {never} 0.02247191 1 0.02247191 6.209302 6   
## [3] {hurts} => {might} 0.02247191 1 0.02247191 3.000000 6   
## [4] {town} => {might} 0.02247191 1 0.02247191 3.000000 6   
## [5] {enough} => {like} 0.02247191 1 0.02247191 4.107692 6   
## [6] {enough} => {might} 0.02247191 1 0.02247191 3.000000 6   
## [7] {als} => {might} 0.02247191 1 0.02247191 3.000000 6   
## [8] {fire} => {alslike} 0.02247191 1 0.02247191 3.256098 6   
## [9] {fire} => {might} 0.02247191 1 0.02247191 3.000000 6   
## [10] {walk} => {alslike} 0.02247191 1 0.02247191 3.256098 6   
## Apriori  
##   
## Parameter specification:  
## confidence minval smax arem aval originalSupport maxtime support minlen  
## 1e-04 0.1 1 none FALSE TRUE 5 0.01 2  
## maxlen target ext  
## 10 rules TRUE  
##   
## Algorithmic control:  
## filter tree heap memopt load sort verbose  
## 0.1 TRUE TRUE FALSE TRUE 2 TRUE  
##   
## Absolute minimum support count: 2   
##   
## set item appearances ...[1 item(s)] done [0.00s].  
## set transactions ...[3729 item(s), 267 transaction(s)] done [0.00s].  
## sorting and recoding items ... [685 item(s)] done [0.00s].  
## creating transaction tree ... done [0.00s].  
## checking subsets of size 1 2 3 4 5 6 7 8 done [12.55s].  
## writing ... [4923634 rule(s)] done [2.63s].  
## creating S4 object ... done [3.26s].  
## [1] "ARM Analysis That Lead To Love"  
## lhs rhs support confidence coverage lift count  
## [1] {close} => {love} 0.01123596 1.00 0.01123596 8.090909 3   
## [2] {dry} => {love} 0.01123596 1.00 0.01123596 8.090909 3   
## [3] {im} => {love} 0.01123596 1.00 0.01123596 8.090909 3   
## [4] {breath} => {love} 0.01123596 1.00 0.01123596 8.090909 3   
## [5] {brown} => {love} 0.01123596 0.75 0.01498127 6.068182 3   
## [6] {lately} => {love} 0.01123596 1.00 0.01123596 8.090909 3   
## [7] {rainbow} => {love} 0.01123596 0.75 0.01498127 6.068182 3   
## [8] {knows} => {love} 0.01123596 0.75 0.01498127 6.068182 3   
## [9] {pourin} => {love} 0.01123596 0.75 0.01498127 6.068182 3   
## [10] {streets} => {love} 0.01123596 1.00 0.01123596 8.090909 3   
## [1] "ARM Sorted by Support"  
## lhs rhs support confidence coverage lift   
## [1] {might} => {love} 0.12359551 0.3707865 0.3333333 3.000000  
## [2] {alslike} => {love} 0.10861423 0.3536585 0.3071161 2.861419  
## [3] {alslike, might} => {love} 0.10861423 0.3536585 0.3071161 2.861419  
## [4] {like} => {love} 0.09363296 0.3846154 0.2434457 3.111888  
## [5] {like, might} => {love} 0.09363296 0.3846154 0.2434457 3.111888  
## [6] {know} => {love} 0.08988764 0.3692308 0.2434457 2.987413  
## [7] {know, might} => {love} 0.08988764 0.3692308 0.2434457 2.987413  
## [8] {alslike, like} => {love} 0.08614232 0.3650794 0.2359551 2.953824  
## [9] {alslike, like, might} => {love} 0.08614232 0.3650794 0.2359551 2.953824  
## [10] {got} => {love} 0.08239700 0.4400000 0.1872659 3.560000  
## count  
## [1] 33   
## [2] 29   
## [3] 29   
## [4] 25   
## [5] 25   
## [6] 24   
## [7] 24   
## [8] 23   
## [9] 23   
## [10] 22   
## [1] "ARM Sorted by Confidence"  
## lhs rhs support confidence coverage lift count  
## [1] {close} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [2] {dry} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [3] {im} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [4] {breath} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [5] {lately} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [6] {streets} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [7] {understand} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [8] {taste} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [9] {built} => {love} 0.01123596 1 0.01123596 8.090909 3   
## [10] {block} => {love} 0.01123596 1 0.01123596 8.090909 3

